

1400 South 19<sup>th</sup> Avenue Bozeman, MT 59718

July 31, 2015

To: Governor's Office, Sheena Wilson, State Capitol, Room 204, P.O. Box 200801, Helena, MT 59620-0801 Environmental Quality Council, State Capitol, Room 106, P.O. Box 201704, Helena, MT 59620-1704 Dept. of Environmental Quality, Metcalf Building, P.O. Box 200901, Helena, MT 59620-0901 Dept. of Natural Resources & Conservation, P.O. Box 201601, Helena, MT 59620-1601 Montana Fish, Wildlife & Parks:

Director's Office Parks Division Lands Section FWP Commissioners
Fisheries Division Legal Unit Wildlife Division Design & Construction

MT Historical Society, State Historic Preservation Office, P.O. Box 201202, Helena, MT 59620-1202

MT State Parks Association, P.O. Box 699, Billings, MT 59103

MT State Library, 1515 E. Sixth Ave., P.O. Box 201800, Helena, MT 59620

James Jensen, Montana Environmental Information Center, P.O. Box 1184, Helena, MT 59624

Janet Ellis, Montana Audubon Council, P.O. Box 595, Helena, MT 59624

George Ochenski, P.O. Box 689, Helena, MT 59624

Jerry DiMarco, P.O. Box 1571, Bozeman, MT 59771

Montana Wildlife Federation, P.O. Box 1175, Helena, MT 59624

Wayne Hurst, P.O. Box 728, Libby, MT 59923

Jack Jones, 3014 Irene St., Butte, MT 59701

#### Ladies and Gentlemen:

The enclosed decision notice is for the proposed draw down of Pond 4 on the Canyon Ferry Wildlife Management Area (CFWMA). The draw down will commence in late July/early August, and if successful, will be used to affect a complete carp kill in the pond and to aerate the soils in the pond, all to promote an increase in invertebrates and submergent vegetation to improve waterfowl habitat in the pond and hence on the CFWMA. The goal will be to completely dry up the pond or to at least get water levels low enough in winter that carp will be winter killed (any remaining water in the pond freezes in its entirety). If the draw down is successful, the pond will be kept dry for an extended time period in order to promote a better invertebrate and submergent vegetation response to the drawdown. The pond will likely start filling again with water flowing or seeping in from Canyon Ferry Reservoir sometime in the late spring or summer of 2016.

Montana Fish, Wildlife & Parks is required by the Montana Environmental Policy Act (MEPA) to assess significant potential impacts of a proposed action to the human and physical environment. In compliance with MEPA, an Environmental Assessment (EA) was completed for the proposed project by FWP and released for public comment on June 5, 2015.

Public comments on the proposed project were taken for 31 days (through July 6, 2015). The EA was mailed to 64 individuals and groups; legal notices were printed in the Bozeman Chronicle, Helena Independent Record, and the Broadwater County Reporter. The Environmental Assessment was also posted on the FWP webpage: <a href="http://fwp.mt.gov//publicnotices/">http://fwp.mt.gov//publicnotices/</a>. A total of three comments were received on the project, two during the official comment period and one a couple of days after the close of the comment period.

Based on the Environmental Assessment, the public comments received, and benefits and risks associated with this project, it is my decision to go forward with the proposed action (Alternative B) of doing a water drawdown in Pond 4 of the Canyon Ferry WMA. I find there to be no significant impacts on the human and physical environments associated with this project. Therefore, I conclude that the Environmental Assessment is the appropriate level of analysis, and that an Environmental Impact Statement is not required.

Questions regarding this Decision Notice should be mailed to:

Adam Grove Montana Fish, Wildlife & Parks P.O. Box 998 Townsend, MT 59644 Or e-mailed to: adgrove@mt.gov

Sincerely,

Sam B. Sheppard

Region Three Supervisor

Attachment



# ENVIRONMENTAL ASSESSMENT DECISION NOTICE for the Canyon Ferry WMA Pond 4 Water Drawdown

Montana Fish, Wildlife & Parks Region 3, Bozeman July 2015

#### **Preface**

The enclosed Decision Notice has been prepared for the proposed water drawdown on Canyon Ferry Wildlife Management Area's Pond 4. Canyon Ferry WMA is administered by the Bureau of Reclamation (BOR) but is managed by Montana Fish, Wildlife & Parks (MFWP) through a management agreement with the Bureau of Reclamation. The proposed drawdown of Pond 4 would occur starting around mid-July 2015 and continue until the pond is either completely dry or water levels are at least low enough to achieve a winter kill of carp. Carp are negatively impacting water quality in the pond and, as a result, the quality of waterfowl habitat in the pond. If the drawdown is successful, the pond will be kept dry for an extended time period (likely several months at a minimum) in order to promote a better invertebrate and submergent vegetation response to the drawdown which will improve waterfowl and shorebird habitat in the pond.

Currently, there is extremely high turbidity in Pond 4 caused by high densities of carp. Carp inhibit the growth of submergent vegetation as a result of their feeding actions which keeps sediments stirred up resulting in muddy or murky water with little light penetration for the growth of submergent aquatic vegetation. Turbidity and presence of large-bodied fish are also negatively associated with wetland invertebrate density and diversity. Water levels at Pond 4 have traditionally been managed at relatively stable levels. Stable conditions lead to anaerobic soil conditions, and the lack of soil oxygen inhibits root growth of many wetland plants. Stable water conditions also lead to reduced wetland invertebrate numbers and diversity. Drawn-downs are an effective management tool to simulate a wet-dry hydrological regime. A dry cycle aerates the soil, allowing oxygen to be absorbed directly by plant roots which stimulates growth. Draw-downs to improve wetland plant communities also can increase invertebrate productivity. The goal will be to completely dry up the pond or to at least get water levels low enough in winter that carp will be winter killed (any remaining water in the pond freezes in its entirety).

It may not be possible to get the pond completely dry due to factors outside of the control of MFWP, such as inoperable water control structures that regulate and/or control water inflow into the pond, other potential sources of water that may flow into the pond (e.g. creeks or non-Department controlled irrigation ditches) or arise (springs) in the pond, seepage through the dike

from Canyon Ferry Reservoir, or overland flow (flooding) that may occur during the winter as a result of ice jams on the Missouri River. The aforementioned inoperable water control structures are the responsibility of the BOR. Even if a total drawdown and total dryness cannot be achieved, there are still ecological benefits to a drawdown such as improved soil oxygen, vegetative response, and invertebrate densities in those areas that are devoid of water for an extended period.

### **Public Process and Comments**

FWP is required by the Montana Environmental Policy Act (MEPA) to assess potential impacts of a proposed action to the human and physical environment. An Environmental Assessment (EA) in compliance with MEPA was completed for the proposed project by FWP and released for public comment on June 5, 2015.

The following two alternatives were considered in this Environmental Assessment:

<u>Alternative A</u>: **No Action.** Under this action the Pond 4 water drawdown would not occur.

<u>Alternative B</u>: **Proposed Action:** MFWP would draw down Pond 4 on the CFWMA to effect a complete carp kill in the pond and to aerate the soils in the pond, all to promote an increase in invertebrates and submergent vegetation to improve waterfowl and shorebird habitat in the pond and hence on the CFWMA.

Public comments were taken for 31 days (through July 6, 2015). Legal notices were printed in the Bozeman Chronicle, Helena Independent Record, and the Broadwater County Reporter. The Environmental Assessment was also posted on the FWP webpage: http://fwp.mt.gov//publicnotices/.

Two individuals submitted comments during the official comment period. Both individuals were in support of the proposed action. One individual didn't provide any further comments. The second individual who was commenting on behalf of Ducks Unlimited in addition to supporting the proposed action, also recommended that the drawdown be for 6-12 months or longer or be extended at least until beneficial plant species had germinated in sufficient number on mudflats and carp had been eliminated. He also recommended that a fish barrier be installed to minimize fish re-colonization of the pond once the drawdown was completed and the pond was refilled. A third individual submitted comments on behalf of himself and the Broadwater Rod & Gun Club after the close of the official comment period. He was also in support of the proposed action and also recommended that some action be taken to limit the re-colonization of the pond by carp post drawdown. Given that his comments were similar in nature to the other comments that were received, they will be addressed.

The following is summary of the additional actions that were recommended in the received comments and FWP's response to them.

1. The drawdown should be of extensive enough in duration to allow beneficial plant species to germinate and for all the carp to be eliminated.

MFWP's response: It is MFWP's plan to initiate a slow water drawdown starting in July 2015 and to continue that drawdown until the pond is either completely dry or water levels are at least low enough to achieve a winter kill of carp. If the drawdown is successful, the pond will be kept dry for an extended time period (likely several months at a minimum) in order to promote a better invertebrate and submergent vegetation response to the drawdown which will improve waterfowl and shorebird habitat in the pond. As mentioned in the EA, draw-downs are an effective

management tool to simulate a wet-dry hydrological regime. A dry cycle aerates the soil, allowing oxygen to be absorbed directly by plant roots, which stimulates growth. Draw-downs to improve wetland plant communities also can increase invertebrate productivity.

Unfortunately, it may not be possible to get the pond completely dry or to keep it dry for an extended time period due to factors outside of the control of MFWP. These factors include inoperable water control structures that regulate and/or control water inflow into pond, other potential sources of water that may flow into the pond (e.g. creeks or non Department controlled irrigation ditches originating from west of U.S. Hwy 287) or springs within in the pond itself, seepage through the dike from Canyon Ferry Reservoir, and overland flow (flooding) that may occur during the winter as a result of ice jams on the Missouri River. Even with the intake control structure being turned off some water continues to flow into the west canal, as the structure either does leaks or doesn't seal tightly or, and/or we have groundwater surfacing into the canal. There are additional similar structures further down on the canal. Those structures have similar issues as the main one located at the river. However, we are hopeful that by shutting them all off that we can at least minimize the amount of water potentially coming into Pond 4.

In addition to the water control structures located on the canal, there are also four water control outlets located on the main dike between Pond 4 and Canyon Ferry Reservoir and at least two overflow conduits. The water control outlets are primarily supposed to allow water to be released from Pond 4 back into the main reservoir. However, several of these outlet structures aren't functioning, so that even when they are supposedly closed, water flows from the reservoir into Pond 4 when Canyon Ferry Reservoir reaches a particular elevation. The aforementioned nonfunctioning water control outlets/structures are the responsibility of the BOR to fix under the terms of its agreement with MFWP. The BOR is aware of the problems with the outlet structures. Lastly, the dikes between the reservoir and the ponds were designed to be fairly porous, since the ponds were created originally for dust abatement when the reservoir was at lower levels. As a result, when the reservoir reaches a particular elevation, seepage through the dike between Pond 4 and the reservoir occurs until water levels in Pond 4 and the reservoir will reach equilibrium. Even if a total drawdown and complete drying cannot be achieved, or Pond 4 can only be kept dry for a limited amount of time, we anticipate many of the same ecological benefits, but just to a more limited extent.

2. A fish barrier should be installed or other action taken to limit the re-colonization of the pond by carp post drawdown.

MFWP's response: It is MFWP's plan to investigate the possibility of installing some sort of fish screen/barrier on the west canal to prevent the re-colonization of carp into Pond 4. However, any sort of fish screen/barrier would have to be economically feasible (MFWP would have only limited funds available for potential fish barriers on the CFWMA), relatively maintenance free, as keeping a fish barrier clean of vegetation and moss could require a significant investment of already limited MFWP staff time, and be designed to still allow water to reach Pond 4. Any sort of fish screen/barrier would have to be designed to not only keep out the larger adult fish but also carp fry in order to keep the pond from being repopulated. Ideally, the screen/barrier would also address the issue of overland flow coming into the canal from periodic flood events that occur as a result of winter ice jams on the Missouri River. Lastly, it is believed that fish are potentially able to enter the pond through the water control outlets and overflow conduits that were mentioned above (item #1). Given this source of potential fish re-colonization of the pond, it may be

premature for FWP to install any sort of fish screen/barrier on the canal until these other potential sources of carp invasion are investigated and effectively addressed.

## **Decision**

It is my decision, based on the Environmental Assessment and public comment, to approve the proposed action of conducting a water drawdown in Canyon Ferry WMA's Pond 4. If successful, the proposed action will affect a complete carp kill in the pond and aerate the soils in the pond which is expected to promote an increase in invertebrates and submergent vegetation. Correspondingly, this will improve waterfowl and shorebird habitat in the pond and hence on the CFWMA. The proposed action will work toward MFWP meeting its objectives of improving habitat conditions on the Canyon Ferry WMA for waterfowl. The analysis did not reveal any significant impacts to the human or physical environment as a result of the project. I therefore conclude that the Environmental Assessment is the appropriate level of analysis, and that an Environmental Impact Statement is not required.

Sam R. Shennard

Sam B. Sheppard Region 3 Supervisor Montana Fish, Wildlife & Parks 8/3/15\_\_\_

Date